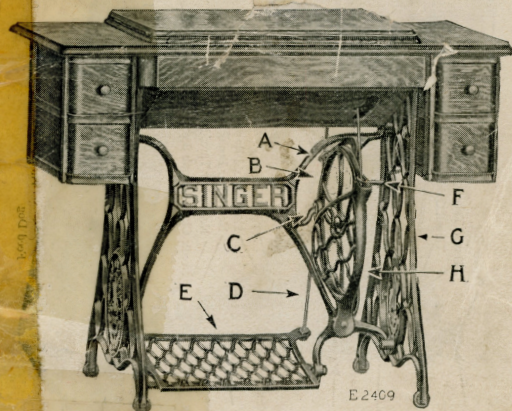


SINGER SEWING MACHINE

No. 66

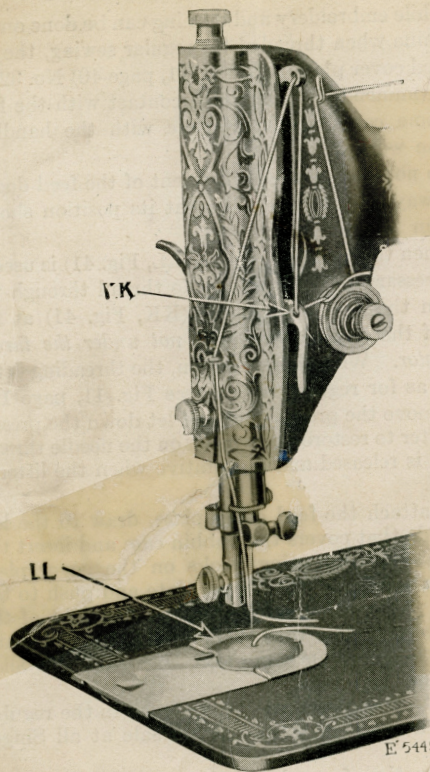
WITH ATTACHMENTS 120360

OSCILLATING HOOK, FOR FAMILY USE



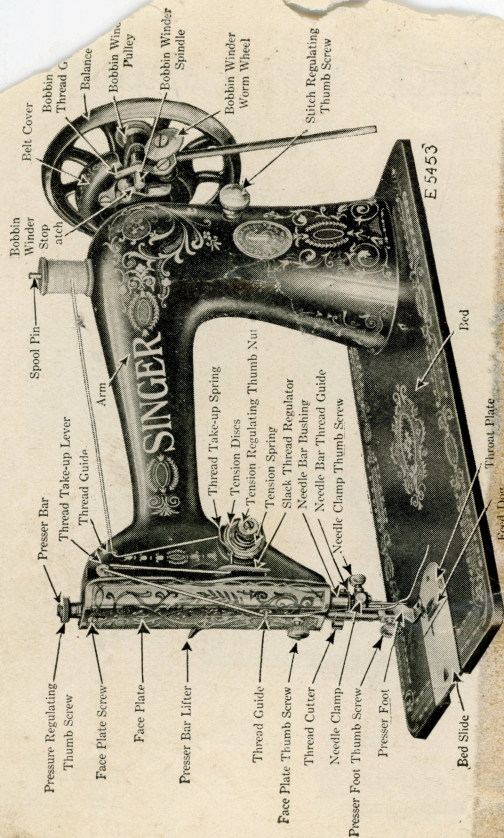
PARTS OF THE MACHINE STAND

- | | |
|---------------------|-----------------|
| A. BELT GUIDE | E. TREADLE |
| B. BAND WHEEL | F. BELT SHIFTER |
| C. BAND WHEEL CRANK | G. LEG |
| D. PITMAN | H. DRESS GUARD |



E 5445

FIG. 41. MACHINE THREADED FOR FARMHOUSE USE



EMBROIDERY AND DARNING

While embroidery and darning can be done on the machine when threaded for regular sewing, the use of feed cover plate (LL, Fig. 41, page 40) No. 32622 is recommended, as movable contact with the feed in some cases might interfere with the handling of the work.

Do not change the adjustment of the feed dog in any way as it is essential that its position should remain as originally fixed.

When the feed cover plate (LL, Fig. 41) is used it is necessary to lead the needle thread through the eye in the thread regulator (KK, Fig. 41) at the left of the tension discs and *not under the thread regulator*. With this exception, the threading is the same as for regular sewing (see Fig. 11, page 11).

Remove the presser foot and let down the presser bar lifter to restore the tension on the needle thread, which is released and inoperative when the lifter is raised.

To attach the feed cover plate, draw to the left the slide that covers the bobbin case and insert the downwardly projecting hooks on the cover plate under the edge of the throat plate and push to the right. After bringing the hole at the right of the cover plate in line with the hole in the throat plate, press the cover into position, and close the slide (see Fig. 41).

Feed cover plates are not included in the regular sets of attachments; they are on sale at all Singer shops.

Instructions for embroidery are contained in the "Singer Instructions for Art Embroidery," sold by Singer Sewing Machine Company at a reasonable

To Use the Cloth Guide

To ensure accurate guiding of the work when sewing close to the edge of the goods, the cloth

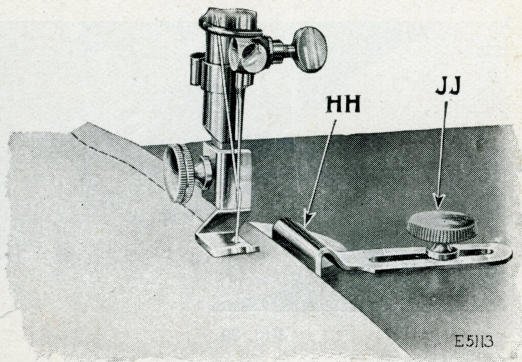


FIG. 40

guide (HH, Fig. 40) should be used. Fasten the cloth guide to the bed of the machine by means of the clamping thumb screw (JJ, Fig. 40), inserting the thumb screw into either one of the two screw holes in the bed of the machine. The cloth guide can be adjusted to bring the edge of the goods as close to the line of stitching as desired.

INSTRUCTIONS FOR OPERATING THE MACHINE

Raise the presser foot (K, Fig. 3) by means of the presser bar lifter (L, Fig. 3) to prevent injury to the foot (K, Fig. 3) and feed (J, Fig. 3).

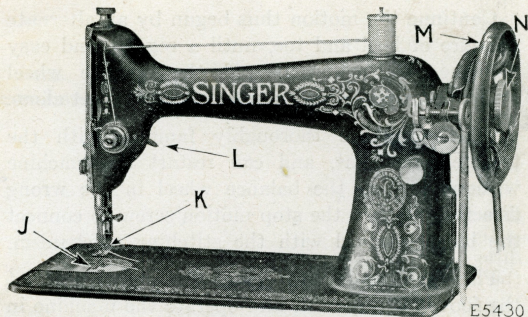


FIG. 3. FRONT VIEW OF THE MACHINE

It is necessary to understand the stop motion (N, Fig. 3) by which the balance wheel (M, Fig. 3) can be released when required, thus enabling the operator to become proficient in the use of the treadle and permitting the winding of bobbins without running the stitching mechanism. It also allows the operator to wind bobbins without removing partially sewn work and without unthreading the machine.

To release the balance wheel (M, Fig. 3, page 3), turn the stop motion screw (N, Fig. 3) over toward you. It may be necessary to hold the balance wheel while loosening the stop motion screw.

After releasing the balance wheel, place your feet upon the treadle and with the right hand turn the balance wheel over toward you. This will start the band wheel, treadle and pitman, the sewing mechanism having been disconnected.

Continue the motion thus begun by an alternate pressure of heel and toe, until a regular and easy movement is acquired, and the balance wheel kept in continuous rotation by use of the feet alone.

When you are thoroughly familiar with the treadle movement, and can restart the machine without turning the balance wheel in the wrong direction, tighten the stop motion screw to connect the balance wheel with the stitching mechanism.

Place a piece of cloth under the presser foot, let the foot down upon it, and operate the machine in this way without being threaded, until you have become accustomed to guiding the material.

To Ensure Perfect Action of the Machine

The balance wheel must always turn over toward the operator.

Do not run the machine with the presser foot resting on the feed without cloth under the presser foot.

To Adjust the Ruffler for Group Plaiting and Gathering

The ruffler can be adjusted for group plaiting by lifting the adjusting lever (10, Fig. 39) and placing

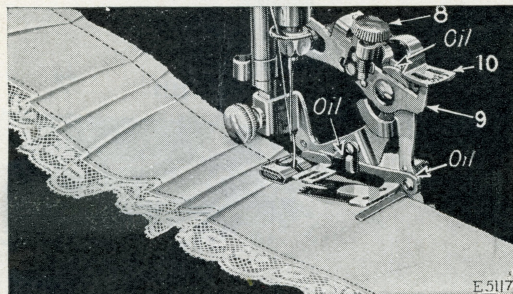


Fig. 39

it on top of the projection (9, Fig. 39) at the point indicated by the star on the adjusting lever. This should be done at the points where you wish to make the space between the plaits. The ruffler will then stop and plain stitching will be made. When the desired space has been made, adjust the lever (10) so that the projection (9) enters the slot marked "5". By alternately making groups of plaits and plain spaces, as shown in Fig. 39, very attractive work can be produced.

To Oil the Ruffler

Occasionally apply a drop of oil to the working parts of the ruffler at each of the places indicated by arrows in Fig. 39. After oiling, operate the ruffler on a waste piece of material to prevent the oil soiling the work. If the ruffler does not plait evenly, a drop of oil may remedy the trouble.

edge of the ruffle to the right of the attachment as shown in Fig. 37.

The material for piping must measure about $\frac{1}{4}$ inch wide when folded in the centre and is usually cut on the bias. Place the piping material in the ruffler, following the line 4, in Fig. 33, with the folded edge of the piping to the right. The material to which the piping and ruffling are to be sewn should be folded on the edge and inserted in the ruffler, following the line 5, in Fig. 33.

To Adjust the Ruffler for Plaiting

Raise the adjusting lever (10, Fig. 38) and move it to the right so that the projection (9, Fig. 38)

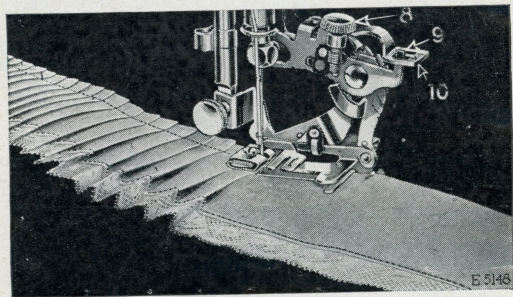


Fig. 38

will enter the slot marked "5" in the adjusting lever when the lever is released. The ruffling blade will then move forward and back once at every five stitches. Insert the material to be plaited between the two blue blades, following the line 2, in Fig. 33. The fullness of the plaits is regulated by the adjusting screw (8, Fig. 38) and the length of stitch. To make a fuller plait, turn the adjusting screw (8) down, also lengthen the stitch. To make a finer plait, turn the adjusting screw (8) up, also shorten the stitch.

Do not run the machine when both bobbin case and needle are threaded unless there is material under the presser foot.

Do not try to help the machine by pulling the fabric lest you bend the needle. The machine feeds the work without assistance.

The slide over the bobbin case should be kept closed when the machine is in operation.

To Take Out the Bobbin

Draw to the left the slide in the bed of the machine and press the forefinger of the right hand

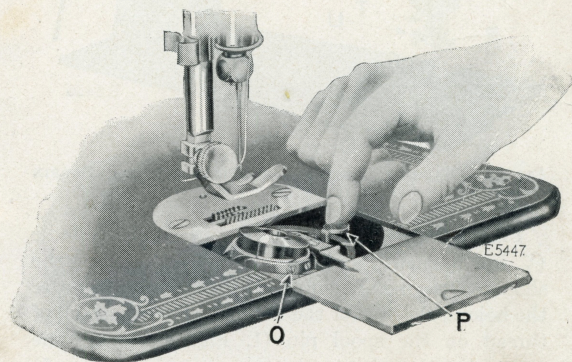


FIG. 4. REMOVING THE BOBBIN

upon the bobbin ejector (P, Fig. 4) as shown above; this will raise the bobbin so that it can easily be taken out.

To Wind the Bobbin

Release the balance wheel (M, Fig. 3, page 3) by turning the stop motion screw (N, Fig. 3) over toward you.

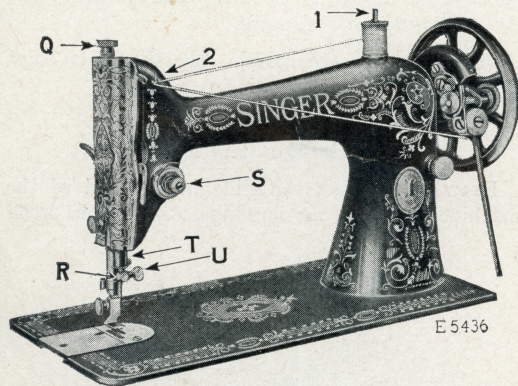


FIG. 5. MACHINE THREADED FOR WINDING THE BOBBIN

Place the bobbin on the bobbin winder spindle (V, Fig. 6, page 7) and push it up closely against the shoulder, having the small pin in the spindle enter the hole in the side of the bobbin. Put the spool of thread on the spool pin (1, Fig. 5). Pass the end of the thread into the thread guide (2, Fig. 5) then up into the lower eyelet (3, Fig. 6) of the bobbin winder thread guide, into the notch (4, Fig. 6) and pass the thread through the hole in the left side of the bobbin (5, Fig. 6), from the inside. Press the bobbin winder pulley (Y, Fig. 6) down on the

the ruffle so that the wrong sides are together. If the facing is to be on the wrong side, place the right sides of the garment and the ruffle together.

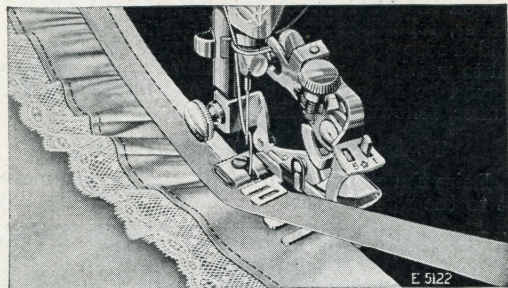


FIG. 36

Piping a Ruffle

Insert the material to be ruffled between the two blue blades, following the line 2, in Fig. 33. This

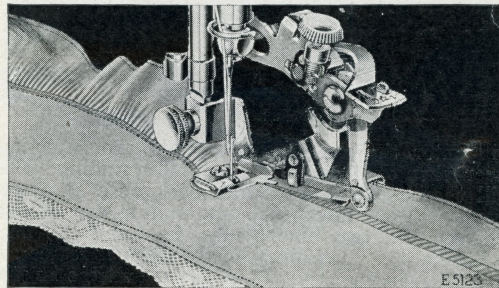


FIG. 37

material must not be over $1\frac{1}{4}$ inches wide, as it is carried through the ruffler with the finished

To Make a Ruffle and Sew it to a Garment in One Operation

Insert the material to be ruffled between the two blue blades, as shown in Fig. 35, following the line

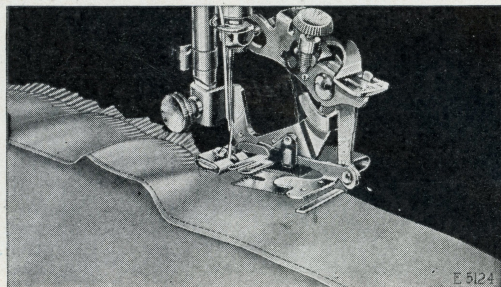


Fig. 35

2, in Fig. 33. Place the garment to which the ruffle is to be attached, under the separator blade, following the line 1, in Fig. 33. Proceed the same as for plain gathering.

The edge of the ruffled seam can be bound by using the binder as instructed on pages 28 and 29.

To Ruffle and Sew on a Facing in One Operation

Insert the material to be ruffled between the two blue blades, following the line 2, in Fig. 33. Place the garment to which the ruffle is to be attached, under the separator blade, following the line 1, in Fig. 33. Place the material for the facing over the upper blue blade, as shown in Fig. 36, following the line 3, in Fig. 33. The facing may be straight or bias material. If the facing is to be on the right side of the garment, place the garment and

balance wheel hub, and the latch (X, Fig. 6) will drop down and hold it. Then operate the treadle the same as for sewing.

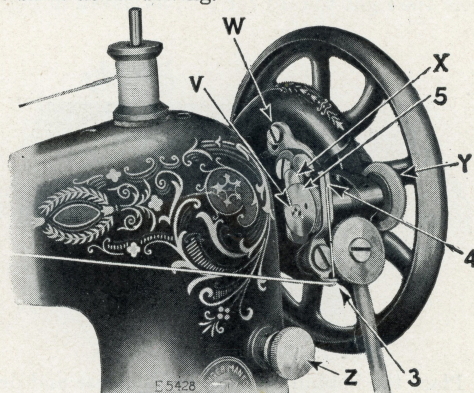


FIG. 6. WINDING THE BOBBIN

The end of the thread must be held by the hand until a few coils are wound and should then be broken off. Figs. 5 and 6 show the bobbin winder properly threaded and in position for winding. When sufficient thread has been wound upon the bobbin, the bobbin winder is automatically released from the balance wheel.

If the pressure of the rubber ring (Y, Fig. 6) against the hub of the balance wheel is insufficient for winding the bobbin, loosen the adjusting screw (W, Fig. 6) and press the bobbin winder lightly until the rubber ring is in contact with the hub of the balance wheel; then tighten the screw (W).

Bobbins can also be wound while the machine is sewing.

To Replace the Bobbin

Hold the bobbin between the thumb and forefinger of the left hand, the thread leading on top from the right toward the left, as shown in Fig. 7.

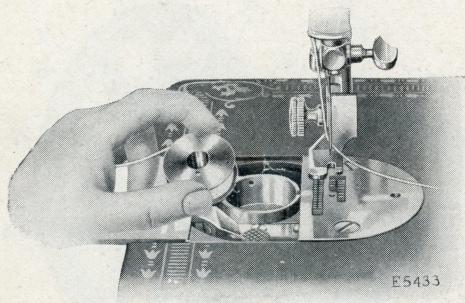


FIG. 7. REPLACING THE BOBBIN

Place the bobbin into the bobbin case and draw the thread into the slot (1, Fig. 8) in the bobbin case, as shown below.

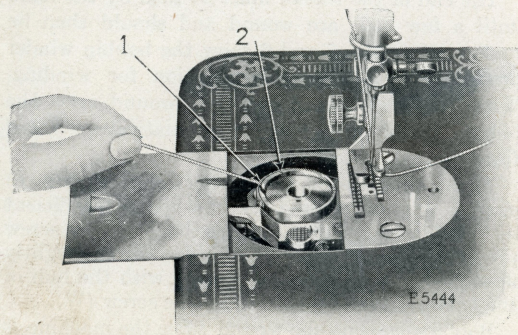


FIG. 8. THREADING THE BOBBIN CASE

To Adjust the Ruffler for Plain Gathering

Raise the adjusting lever (10, Fig. 34) and move it to the left so that the projection (9, Fig. 34) will

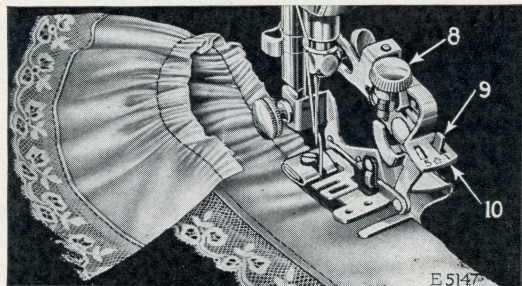


FIG. 34

enter the slot marked "1" in the adjusting lever (10) when the lever is released. The ruffling blade will then move forward and back once at every stitch. Insert the material to be ruffled between the two blue blades, following the line 2 in Fig. 33. Draw the material slightly back of the needle, lower the presser bar and commence to sew.

To make a finer gather, shorten the stroke of the ruffling blade by turning the adjusting screw (8, Fig. 34) up, also shorten the stitch. To make a fuller gather, lengthen the stroke of the ruffling blade by turning the adjusting screw (8) down, also lengthen the stitch. By varying these adjustments many pleasing varieties of work can be accomplished.

The names and uses of the principal parts of the ruffler are as follows:

(See Nos. in Fig. 33)

- 6—**Foot**—the part by which the ruffler is attached to the presser bar.
- 7—**Fork Arm**—the section that must be placed astride the needle clamp.
- 8—**Adjusting Screw**—the screw that regulates the fullness of the gather.
- 9—**Projection**—the part that projects through the slots in the adjusting lever.
- 10—**Adjusting Lever**—the lever that sets the ruffler for plain gathering or plaiting.
- 11—**Heading Guide**—guide for the heading of the ruffle.
- 12—**Separator Plate**—the guide on the underside of the ruffler, containing several slots into which the edge of the material is slipped to keep the heading of the ruffle even.
- 13—**Ruffling Blade**—the upper blue steel blade with teeth at the end to push the material in plaits up to the needle.
- 14—**Separator Blade**—the lower blue steel blade without teeth, which prevents the teeth of the ruffling blade coming into contact with the teeth of the feed dog.

To Attach the Ruffler to the Machine

Raise the needle bar to its highest point and remove the presser foot. Attach the ruffler foot to the presser bar by means of the thumb screw, at the same time placing the fork-arm astride the needle clamp as shown in Fig. 34.

Draw the thread backward between the bobbin case and the tension spring until it reaches the notch

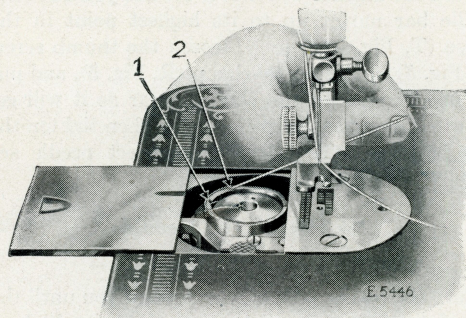


FIG. 9. BOBBIN CASE THREADED

(2, Fig. 9), then pull the thread toward the right, as shown in Fig. 9.

When closing the slide see that the thread is in the slot (3, Fig. 10) in the right edge of the slide, as shown below.

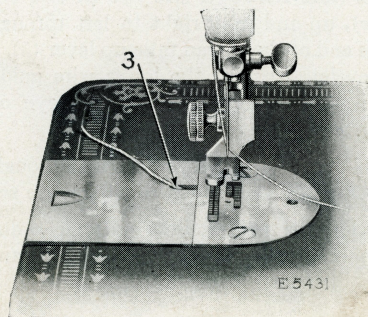


FIG. 10. UNDER THREADING COMPLETED

To Set the Needle

Turn the balance wheel over toward you until the needle bar moves up to its highest point in the sleeve (T, Fig. 5, page 6), loosen the thumb screw (U, Fig. 5) in the needle clamp (R, Fig. 5), and put the needle up into the clamp as far as it will go, with its flat side toward the right; then tighten the thumb screw. To select the correct needle see page 41.

To Thread the Needle

SEE FIG. 11 ON THE FOLLOWING PAGE

Turn the balance wheel over toward you until the thread take-up lever (5) is raised to its highest point. Place the spool of thread on the spool pin at the top of the machine, lead the thread into the thread guide (1) at the left, down, under and from right to left between the tension discs (2), into the small wire spring (3), under the thread regulator (4) at the left (**not through the eye in the thread regulator**), up and from right to left through the hole in the end of the thread take-up lever (5), down into the eyelet (6), into the lower wire guide (7), then from left to right through the eye of the needle (8).

Draw about two inches of thread through the eye of the needle with which to commence sewing.

Instructions for threading the machine for darning and for embroidery are given on pages 39 and 40.

Ruffler

Lines 1, 2, 3, 4 and 5 shown in Fig. 33 indicate where the material is to be placed for various operations, as follows:

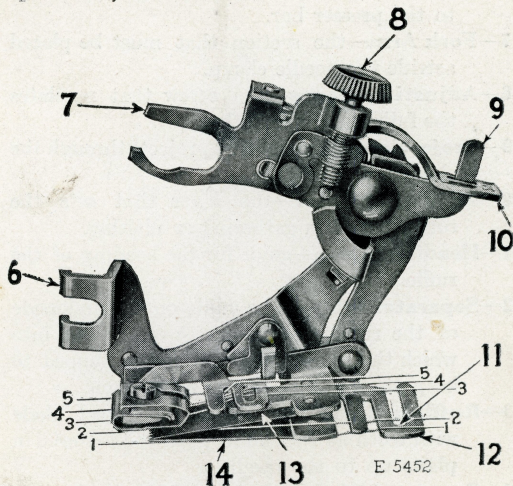


FIG. 33. THE RUFFLER AND ITS PARTS

Line 1—the correct position for the material to which the ruffled material is applied.

Line 2—material to be gathered.

Line 3—the facing for the ruffle.

Line 4—the strip of piping material.

Line 5—the edge to be piped.

Refer to Fig. 33 when inserting the material in the ruffler.

Having adjusted the scales for tuck and space as desired, fold the material and crease by hand; pass

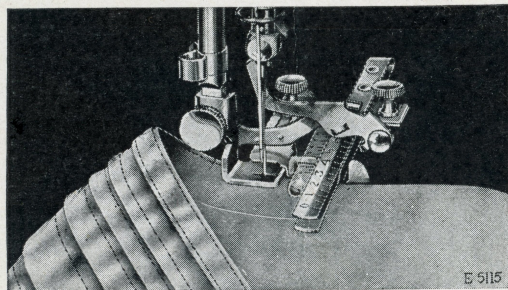


FIG. 32

the folded edge between the spring and spur near you, then between the two blades of the second scale, and back under the presser foot; draw to the right against the guide, lower the presser bar; see that the lever which the needle clamp strikes is in its backward position so as to form a crease for the next tuck, then proceed with the first tuck.

For the second tuck, fold carefully at the crease made by the spur and place the edge of the first tuck underneath and against the spur at the left. The spur will serve as a guide and will also make a distinct crease for the next tuck. Always place the last tuck against the spur to ensure perfect work.

When making the last tuck, the lever upon which the needle clamp strikes while tucking should be raised to its highest point; while the lever is in this position no crease for a succeeding tuck is made upon the goods.

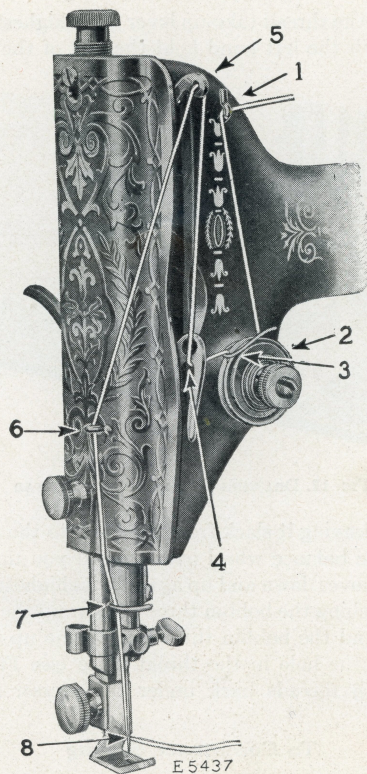


FIG. 11. THREADING THE NEEDLE

To Prepare for Sewing

Have the thread take-up lever at its highest point, then with the left hand hold the end of the needle

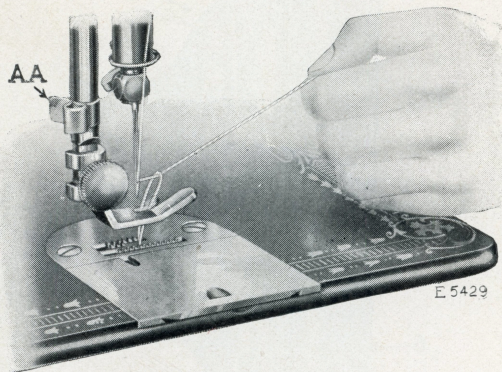


FIG. 12. DRAWING UP THE BOBBIN THREAD

thread, leaving it slack from the hand to the needle. Turn the balance wheel over toward you until the needle moves down and up again to its highest point, thus catching the bobbin thread; draw up the needle thread and the bobbin thread will come up with it through the hole in the throat plate (see Fig. 12). Lay both threads back under the presser foot.

To Commence Sewing

Place the material beneath the presser foot, lower the presser foot and commence to sew, turning the balance wheel over toward you.

instead of on the edge (see Fig. 31). After loosening the binder set screw and adjusting the binder, the

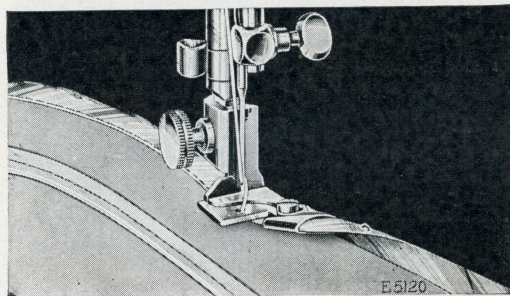


FIG. 31

line of stitching can be brought nearer the centre, this being more effective when making French folds.

TUCKER

Remove the presser foot and attach the tucker in its place. The width of the tuck is determined by the scale of figures nearest the needle, which shows in eighths and sixteenths of an inch the distance of the edge of the fold from the line of stitching.

The crease or mark for the second and following tucks is determined by the scale nearest the operator and this is set by the line in front of the needle hole in the presser foot. For blind tucks without spaces, set both scales at the same figure; to make spaces between the tucks, move the front scale farther to the left until the desired space is obtained.

ADJUSTABLE HEMMER—Wide Hemming

To make a hem more than one inch wide, take out the thumb screw in the hemmer and remove the

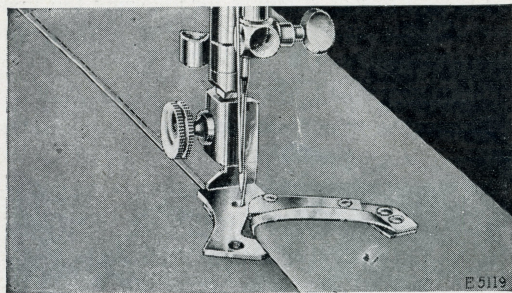


FIG. 30

slide and pointer; fold and crease down a hem of the desired width; pass the fold under the extension at the right of the hemmer, and the edge into the folder as shown in Fig. 30, and proceed to stitch the hem.

BINDER—Binding

Remove the presser foot and attach the binder in its place. Pass the binding through the scroll of the binder and draw it back under the needle. Place the edge of the goods to be bound between the scrolls of the binder and draw it under the needle. Lower the presser bar and sew as usual. To make French folds, proceed as directed for binding except that the fold is stitched on the face of the material

To Remove the Work

Let the thread take-up lever rest at its highest point, raise the presser foot and draw the fabric back and to the left, pass the threads over the thread cutter (AA, Fig. 12, page 12) and pull down lightly to sever them. Leave the ends of the threads under the presser foot.

Tensions

For ordinary stitching, the needle and bobbin threads should be locked in the centre of the thickness of the material, thus:

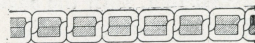


FIG. 13. PERFECT STITCH

If the tension on the needle thread is too tight, or if that on the bobbin thread is too loose, the needle thread will lie straight along the upper surface of the material, thus:



FIG. 14. TIGHT NEEDLE THREAD TENSION

If the tension on the bobbin thread is too tight, or if that on the needle thread is too loose, the bobbin thread will lie straight along the under side of the material, thus:

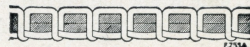


FIG. 15. LOOSE NEEDLE THREAD TENSION

To Regulate the Tensions

The tension on the needle thread should only be regulated when the presser foot is down. Having

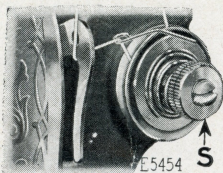


FIG. 16. NEEDLE THREAD TENSION

lowered the presser foot, turn the small thumb nut (S, shown in Fig. 16, above, and Fig. 5, page 6) at the front of the tension discs over to the right to increase the tension. To decrease the tension, turn this thumb nut over to the left.

The tension on the bobbin thread is regulated by the larger screw (O, Fig. 4, page 5) which is nearest the back in the bobbin case tension spring. To increase the tension, turn this screw over toward you. To decrease the tension, turn this screw over from you.

When the tension on the bobbin thread has been once properly adjusted, it is seldom necessary to change it, as a correct stitch can usually be obtained by varying the tension on the needle thread.

To Turn a Corner

Stop the machine when the needle is commencing its upward stroke. Raise the presser foot and turn the work as desired, using the needle as a pivot, then lower the presser foot.

straight, and taking the edges near the beginning of the seam in the right hand, and the ends of the threads in the left hand, draw the edges into the hemmer which will turn them as in hemming. Guide the second row of stitching by following the first row with the inside of the projecting front of the foot hemmer (see Fig. 28, page 26).

ADJUSTABLE HEMMER—Hemming

Remove the presser foot and attach the adjustable hemmer in its place as shown in Fig. 29. This

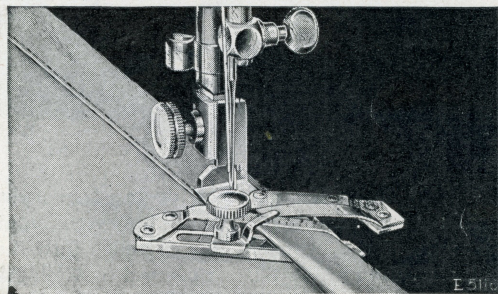


Fig. 29

hemmer will turn hems from $\frac{3}{16}$ inch to 1 in. wide. The adjustment is made by loosening the thumb screw on the hemmer and moving the slide to the right or left until the hem turned is of the desired width. Enter the edge of the cloth into the hemmer under the scale and draw it back and forth until the hem is formed, stopping with the end under the needle. Lower the presser bar and commence to sew, being careful to so guide cloth as to keep hemmer full.

than the upper piece. Stitch them together using the hemmer as a presser foot, the front end of the

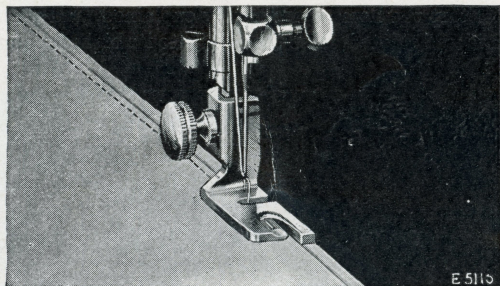


FIG. 27

hemmer forming a guide for the edges of both pieces, the upper piece being guided by the inside and the under piece by the outside of the projecting front of

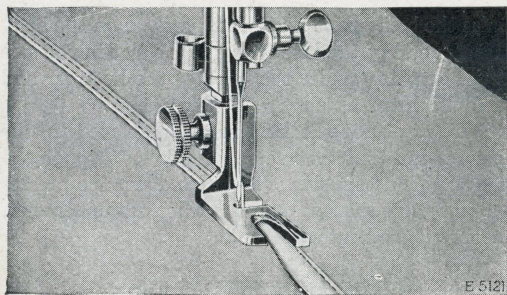


FIG. 28

the foot hemmer (see Fig. 27). Then open the work out flat, wrong side up, the edges standing up

To Regulate the Length of Stitch

The length of stitch is regulated by the large thumb screw (Z, Fig. 6, page 7) at the front of the machine near the bobbin winder.

To lengthen the stitch, turn this thumb screw over to the right. To shorten the stitch, turn this thumb screw over to the left.

To Regulate the Pressure on the Material

For ordinary family sewing it is seldom necessary to change the pressure on the material. If sewing fine silk or flimsy material, lighten the pressure by turning the thumb screw (Q, Fig. 5, page 6) on the top of the machine over to the left. To increase the pressure, turn this thumb screw over to the right. The pressure should be only heavy enough to prevent the material from rising with the needle and to enable the feed to move the work along evenly; a heavier pressure will make the machine run hard.

To Sew Flannel or Bias Seams

Use a short stitch and as light a tension as possible on the needle thread so as to leave the thread loose enough in the seam to allow the goods to stretch if necessary.

A Stitch to Ravel Easily

can be made, if desired, by having the tension on the needle thread so light that the bobbin thread will not draw into the goods but lie straight, as shown in Fig. 15, page 13.

To Oil the Machine

To ensure easy running, the machine and stand require oiling and if used continuously should be



FIG. 17. FRONT VIEW, SHOWING OILING POINTS

oiled each day. With moderate use an occasional oiling is sufficient. Oil should be applied at each of the places shown by arrows in Figs. 17, 18 and 19. One drop of oil at each point is sufficient. Oil holes are provided in the machine for bearings which cannot be directly reached.

To oil the mechanism under the slide, draw the slide (see Fig. 17) to the left and after removing the lint and dust which may have accumulated (see instructions on pages 19 to 22, inclusive) put a few drops of oil on the small piece of felt at the right of the bobbin ejector. The slide should then be closed.

FOOT HEMMER—Hemming and Sewing on Lace

Start the hem as previously explained, and when it is well started, raise the needle to its highest point.

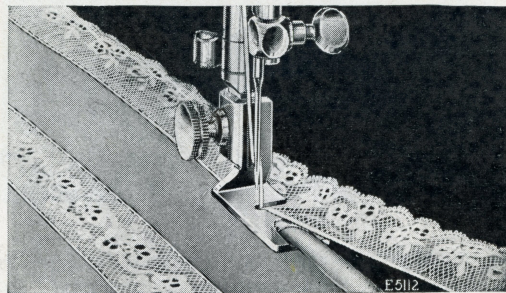


Fig. 26

Raise the hemmer to relieve its pressure on the hem, pass the end of the lace through the slot in the side of the hemmer, under the back of the hemmer and over the hem, as shown in Fig. 26.

Take care that the hem is not displaced in the hemmer and that the needle goes down through the lace and hem together. Then let down the presser bar and guide the lace over the front of the hemmer, keeping it well into the slot.

FOOT HEMMER—Felling

The two pieces of cloth to be felled should be laid one over the other, right sides together, the edge of the under piece being a little farther to the right

INSTRUCTIONS FOR USING THE ATTACHMENTS

FOOT HEMMER—Hemming

Raise the needle to its highest point. Remove the presser foot and attach the foot hemmer in its

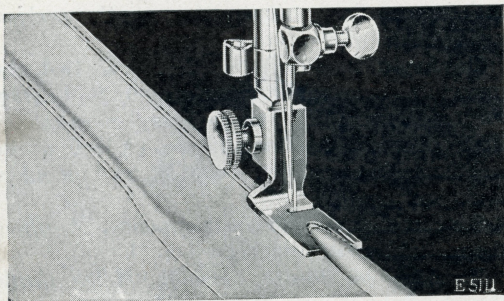


Fig. 25

place (see Fig. 25). Clip off the right hand corner of the cloth, so that it will take the roll easily, turn up the edge about a quarter of an inch, insert it in the mouth of the hemmer and draw or push it along until under the needle. Then let down the presser bar and after taking two or three stitches, draw gently on the ends of the threads to help the work along till the feed catches it. In order to produce a smooth even hem, the mouth of the hemmer must be kept just full.

Fig. 25 also shows what is known as a bag seam or fell, made by passing two pieces of fabric through the hemmer together and hemming them down.

Take out the thumb screw (BB, Fig. 17, page 16) near the lower end of the face plate, raise the plate and slip it off over the head of the screw near the upper end of the plate; put one drop of oil into each of the oil holes and joints.

At the back of the machine is a round plate or cover, fastened by a thumb screw; loosen the screw, turn the plate upward and fasten by tightening the screw; turn the balance wheel slowly and oil the moving parts inside, then turn the cover down and fasten it as before.

To reach the parts underneath the bed, the belt must be thrown off the band wheel on the

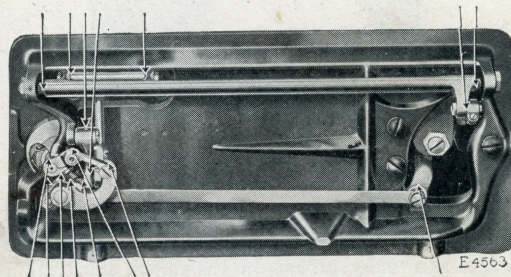


FIG. 18. OILING POINTS IN BASE OF MACHINE

machine stand. For this purpose, the belt shifter (F, Fig. 1, page 1) is placed at the front of the band wheel. By pressing the belt shifter lever to the left and working the treadle meanwhile, the belt is released and the machine can then be turned back

on its hinges. The places to be oiled are indicated in Fig. 18, page 17, by arrows pointing to the oil holes and bearings.

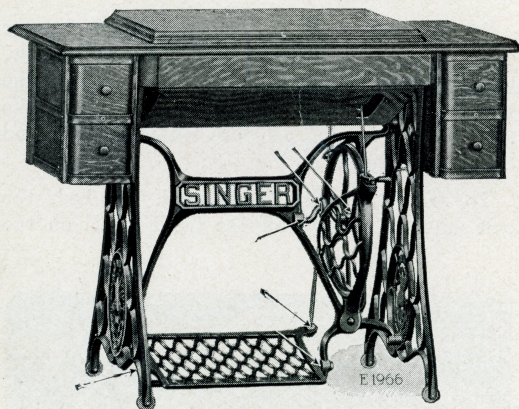


FIG. 19. OILING POINTS IN STAND

To oil the stand, put a drop of oil on each of the places shown by arrows in the above illustration (Fig. 19).

Singer Needles are the best for every kind of sewing machine. They are the only satisfactory needles on the market and are sold in the Singer Green Needle Packet with the famous red letter "S" upon it. Singer Needles can be obtained from any Singer Shop or Singer Salesman.

HINTS

The Belt. See that the belt is not too tight; it should always be tight enough not to slip. If too loose, remove the hook at one end, shorten the belt and rejoin.

Machine Working Heavily. If the machine runs hard after standing idle for some time, use a little kerosene in the oiling places, run the machine rapidly, then wipe clean and oil.

To Avoid Breaking Needles. See that the presser foot or attachments are securely fastened by the thumb screw. Do not sew heavy seams or very thick goods with too fine a needle. A large needle and thread to correspond should be used on heavy work (see page 41).

See that the needle is not bent and avoid pulling the material when stitching.

Breaking of Needle Thread. If the needle thread breaks it may be caused by:

Improper threading.

Tension being too tight.

Needle too fine for size of thread.

The thread being too coarse for size of needle.

The needle being bent, having a blunt point, or being set incorrectly.

Breaking of Bobbin Thread. If the bobbin thread breaks it may be caused by:

Improper threading of bobbin case.

Tension being too tight.

Skiping of Stitches. The needle may not be accurately set into the needle bar or the needle may be blunt or bent. The needle may be too small for the thread in use.

Having set the bobbin case into the correct position, lock the latch (DD, Fig. 23) in the notch (EE, Fig. 23) to hold the bobbin case in place. Then

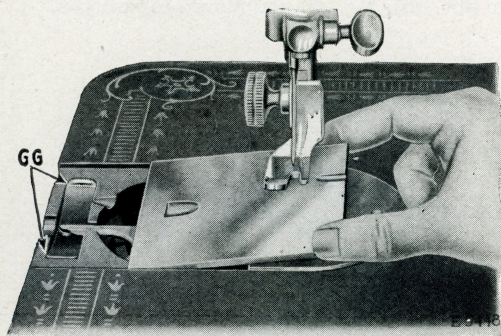


FIG. 24. REPLACING THE SLIDE

replace the slide from the right, as shown in Fig. 24, being careful to see that the two ends of the spring (GG, Fig. 24) enter the grooves on the underside of the slide.

To Clean the Stitch Forming Mechanism

After considerable use, the stitch forming mechanism of the machine may become clogged with lint and this may interfere with the perfect operation of the machine.

Occasionally remove the bobbin case from the machine, as instructed below and on the following page, and remove any lint, etc., which has accumulated in the machine.

To Remove the Bobbin Case

(OPERATOR BEING AT THE FRONT OF THE MACHINE)

Raise the needle to its highest point by turning the balance wheel over toward you. Take out the slide (CC, Fig. 20).

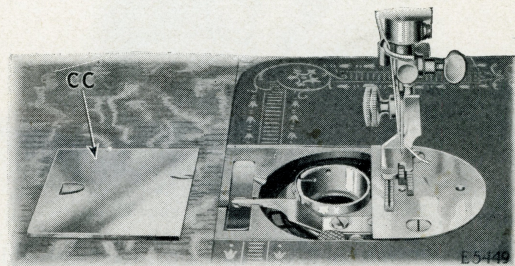


FIG. 20. SLIDE REMOVED

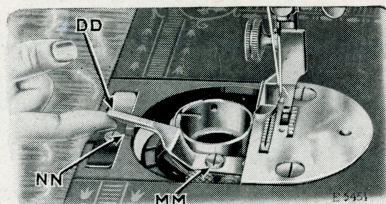


FIG. 21. RAISING THE LATCH

Insert the nail of the forefinger of the left hand under the latch (DD, Fig. 21), raise the latch just high enough to clear the edge at NN, Fig. 21, and then move it toward you.

Under no circumstances must the screw (MM, Fig. 21) be loosened. The loosening of this screw will put the stitch forming mechanism out of adjustment.

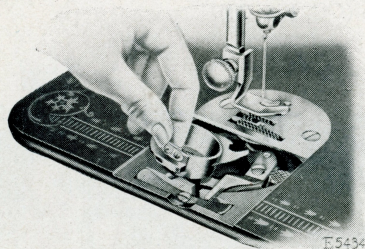


FIG. 22. REMOVING THE BOBBIN CASE

Hold the bobbin case between the forefinger and thumb of the left hand as shown in Fig. 22. Tilt the bobbin case to the left and at the same time slightly turn the right or forked end toward you so that it is moved out of engagement with the sewing hook. Then tilt the bobbin case toward the right and remove it. (See Fig. 22).

To Replace the Bobbin Case

(OPERATOR BEING AT THE FRONT OF THE MACHINE)

See that the needle is raised to its highest point and that the latch (DD, Fig. 23) is raised from the slot (EE, Fig. 23) and moved toward you.

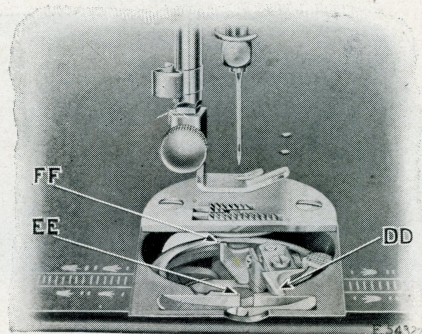


FIG. 23. SHOWING THE POSITION STUD

Hold the bobbin case between the forefinger and thumb of the left hand, as shown in Fig. 22. Insert the forked end of the bobbin case under the throat plate so that the fork straddles the position stud (FF, Fig. 23). Then with a slight twisting motion of the fork to the left and to the back, lightly press the bobbin case downwardly until the edge of the sewing hook engages in the groove under the rim of the bobbin case.